

Claims

What is claimed is:

1. A composition for placing a temporarily visible mark on a surface, comprising:

a) a paint base; and

5 b) a pigmented colorant, dispersed within the paint base, having characteristics that cause the mark to progressively become substantially invisible upon exposure to UV light.

2. The composition of claim 1, further comprising at least one additive selected from the group consisting of UV absorbers and anti-oxidants.

10 3. The composition of claim 1, wherein the pigmented colorant is a dispersion of dyed melamine-toluenesulfonamide-formaldehyde polymer in a mixture of alkyl based resins and aliphatic hydrocarbons.

15 4. The composition of claim 1, wherein the pigmented colorant is about 2 to about 30 parts by weight of the composition.

5. The composition of claim 1, wherein the pigmented colorant has a color selected from the group consisting of red, orange, yellow, pink, blue and green.

6. The composition of claim 3, wherein the pigmented colorant is a Special Fugitive Colorant, with a color selected from the group consisting of: Special Fugitive Yellow Dispersion, No. 121M6669; Special Fugitive Orange Dispersion, No. 121M6665; Special Fugitive Red Dispersion, No. 121M6850; Special Fugitive Red Dispersion; No. MT6633; Special Fugitive Pink Dispersion, No. 121M6832; and Special Fugitive Green Dispersion No. 121M6853.

7. The composition of claim 2, wherein the UV absorber is at least one member selected from the group consisting of: hindered amines and benzotriazole based UV-absorbers.

8. The composition of claim 2, wherein the UV absorber is present in a concentration of about 0.1% to 10% by weight of the composition.

9. The composition of claim 2, wherein the anti-oxidant is a hindered phenolic.

10. The composition of claim 2, wherein the anti-oxidant is present in a concentration of about 0.1% to 10% by weight of the composition.

11. The composition of claim 1, wherein the paint base composition comprises a binder, a solvent and at least one paint additive.

12. The composition of claim 11, wherein the binder is about 8 to 45 parts, the solvent is about 10 to 60 parts and the at least one additive is about 1 to 15 parts, by weight of the composition.

13. The composition of claim 11, wherein the binder is at least one member selected from the group consisting of alkyds, vinyls, soluble cellulose, urethanes, epoxies, modified and unmodified phenolics, acrylics, polystyrenes, alkyls, silicones and terpenes.

14. The composition of claim 11, wherein the solvent is at least one member selected from the group consisting of benzene, toluene, xylene, ethylene dichloride, ethyl acetate, acetone, methyl ethyl ketone, methyl isobutyl ketone, propylene oxide, naphtha, isopropyl alcohol, water, hexanes and ethylene glycol monobutyl ether.

15. The composition of claim 1, further comprising from 15 to about 40 parts by weight of the composition a propellant.

16. The composition of claim 1, wherein the mark remains visible for up to forty (40) days.

17. The composition of claim 1 wherein the mark remains visible for at least four (4) days.

18. The composition of claim 1, further comprising at least one additive from the group consisting of preservatives, plasticizers and surfactants.

19. The composition of claim 1, wherein the surface to be marked is a member selected from the group consisting of asphalt, concrete, grass and soil.

20. A method of temporarily marking a surface, comprising the steps of:

5 a) applying a marking composition having:

 i) a paint base; and

 ii) a pigmented colorant, dispersed within the paint base, having UV-sensitive fading characteristics; and

 b) exposing the marking composition to UV light, such that the mark fades progressively

10 to an extent that it is substantially invisible.

21. The method of claim 20, wherein the marking composition further comprises at least one additive selected from the group consisting of UV absorbers and anti-oxidants.

15 22. The method of claim 20, wherein the pigmented colorant is a dispersion of dyed melamine-toluenesulfonamide-formaldehyde polymer in a mixture of alkyl based resins and aliphatic hydrocarbons.

23. The method of claim 20, wherein the pigmented colorant is about 2 to about 30 parts by
20 weight of the marking composition.

24. The method of claim 20, wherein the pigmented colorant has a color selected from the group consisting of red, orange, yellow, pink, blue and green.

25. The method of claim 22, wherein the pigmented colorant is a Special Fugitive Colorant, with
5 a color selected from the group consisting of: Special Fugitive Yellow Dispersion, No. 121M6669; Special Fugitive Orange Dispersion, No. 121M6665; Special Fugitive Red Dispersion, No. 121M6850; Special Fugitive Red Dispersion; No. MT6633; Special Fugitive Pink Dispersion, No. 121M6832; and Special Fugitive Green Dispersion No. 121M6853.

10 26. The method of claim 21, wherein the UV absorber is selected from the group consisting of hindered amines and benzotriazole based UV-absorbers.

27. The method of claim 21, wherein the UV absorber is present in a concentration of about 0.1% to 10% by weight of the composition.

15 28. The method of claim 21, wherein the anti-oxidant is a hindered phenolic.

29. The method of claim 21, wherein the anti-oxidant is present in a concentration of about 0.1% to 10% by weight of the composition.

30. The method of claim 20, wherein the paint base comprises a binder, a solvent and at least one paint additive.

31. The method of claim 30, wherein the binder is about 8 to 45 parts, the solvent is about 10 to 60 parts and the at least one additive is about 1 to 15 parts, by weight, of the marking composition.

5 32. The method of claim 30, wherein the binder is at least one member selected from the group consisting of alkyds, vinyls, soluble cellulose, urethanes, epoxies, modified and unmodified phenolics, acrylics, polystyrenes, alkyls, silicones and terpenes.

10 33. The method of claim 30, wherein the solvent is at least one member selected from the group consisting of benzene, toluene, xylene, ethylene dichloride, ethyl acetate, acetone, methyl ethyl ketone, methyl isobutyl ketone, propylene oxide, naphtha, isopropyl alcohol, water, hexanes and ethylene glycol monobutyl ether.

15 34. The method of claim 20, wherein the marking composition further comprises from 24 to about 34 parts by weight of the marking composition a propellant.

35. The method of claim 20, wherein the marking composition further comprises at least one additive selected from the group consisting of: preservatives, surfactants and plasticizers.

20 36. The method of claim 17, wherein the surface to be marked is a member selected from the group consisting of asphalt, concrete, grass and soil.